

June 13, 2006

John Gantner
3943 Eagle Parkway
Redding, California 96001

March 2006 Groundwater Monitoring Report
1st Quarter 2006 Operations and Maintenance Report
Former Service Station
1680 Mendocino Avenue
Santa Rosa, California
ECM Project #98-439-14

Dear Mr. Gantner:

This report provides the results of semi-annual groundwater monitoring at the former service station at 1680 Mendocino Avenue in Santa Rosa, California (Figure 1, Appendix A). It also provides the first quarter 2006 report of operations and maintenance for the groundwater extraction (GWE) system operating at the site.

Groundwater Monitoring

On March 28, 2006 ECM personnel visited the site for semi-annual monitoring. Groundwater elevations were measured in four monitoring wells and three piezometers. Groundwater samples were collected from four of the five monitoring wells (MW-1 through MW-4) in accordance with the site monitoring program. Well MW-5 was inaccessible due to pavement resurfacing.

The well locations are shown on Figure 2 (Appendix A). Wellheads and well vaults were observed to be in good condition. Free-phase hydrocarbons were not observed in any of the wells. Water level data and well construction details are provided in Table 1 (Appendix B). A groundwater elevation contour map is included as Figure 2 (Appendix A).

The samples were forwarded under chain of custody record to Entech Analytical Labs Inc., of Santa Clara, California for analysis. Analytical results for groundwater are included in Table 2 (Appendix B). Groundwater samples were collected in accordance with ECM Standard Operating Procedure - Groundwater Sampling (Appendix E). Purge water and decon rinseate were transferred to the remediation system holding tank for treatment and permitted discharge. The chain of custody document and laboratory analytical report are included as Appendix C. The water sampling data sheets are included in Appendix D.

Analytical results for samples collected during the March 2006 monitoring event were consistent with results from previous monitoring events. Monitoring wells MW-2, MW-3, and MW-4 represent the impacted area of the site. Gasoline and BTEX were detected in the samples from wells MW-2, MW-3, and MW-4 at concentrations consistent with previous results.

Well MW-1 is located up-gradient of the most impacted area of the site. Contaminant concentrations have generally been lower in samples from MW-1 compared to samples from wells MW-2 through MW-4. Results from this monitoring event were consistent with previous analytical results.

A trend of decreasing contamination is present in wells MW-1 through MW-4. Analytical results for samples from the March 2006 monitoring event were consistent with this trend.

MW-5 is located approximately 350 ft. downgradient of the site. Well MW-5 was covered by pavement resurfacing at the offsite location and was inaccessible for this sampling event. Results for samples from MW-5 have consistently been low or below detection limits for all analytes.

The next groundwater monitoring event is scheduled for September, 2006.

System Operations and Maintenance

A groundwater extraction system is currently active at the site. System layout and remediation pad details are shown in Figure 2, Appendix A. The system consists of Grundfos submersible, electric pumps set at approximately 34 feet below ground surface in wells EX-1, EX-2, and EX-3. The pumps have been adjusted to extract ground water at approximately 8 gallons per minute (gpm). Extracted ground water is pumped through three 2,000 pound activated carbon vessels and discharged to the sanitary sewer under permit from the Santa Rosa Subregional Water Reclamation System.

GWE system construction was completed in September 2004, and operated for system testing and sampling between September 3 and November 11, 2004. Continuous operations began on November 11, 2004. Between system startup and March 28, 2006, the system extracted 5,605,695 gallons of ground water, according to system totalizer readings (Table 4, Appendix B). During the first quarter of 2006, the system extracted approximately 356,113 gallons of ground water.

GWE system performance can be evaluated by the mass of hydrocarbons removed. Since hydrocarbons have a low solubility in water, mass of hydrocarbons removed by a ground water extraction system is typically low relative to the quantity of hydrocarbons sorbed to soil. Another measure of system performance is the system's ability to control the offsite migration of impacted ground water.

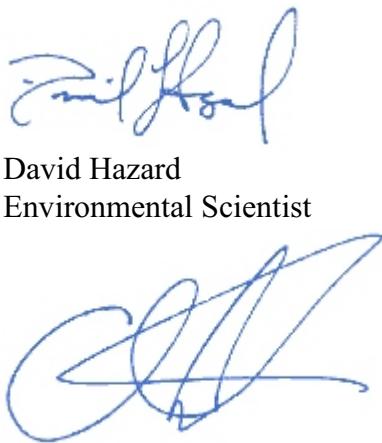
Mass of hydrocarbon removed is calculated using system totalizer readings and ground water influent lab data. During the first quarter of 2006 (January 11 through March 28) approximately 356,113 gallons were extracted by the system. Analytical results for the influent samples collected on January 11, 2006 reported concentrations of gasoline at 2,500 parts per billion (ppb). Influent analytical results for all analytes are provided in Table 3, Appendix B. Analytical

laboratory reports are included in Appendix C. Assuming analytical results are typical for the period, a total mass of approximately 3.4 kg of hydrocarbon was extracted by the system during the first quarter of 2006. Cumulative hydrocarbon removal is provided in Table 5 and depicted in Graph 1, Appendix B.

Piezometers PZ-1 through PZ-3 have been installed to measure drawdown generated by the extraction system. Drawdown is used to measure the ability of the system to control offsite migration of impacted water. Water levels in piezometers, extraction wells, and ground water wells are measured on a monthly basis to verify system performance. Significant drawdown in the piezometers indicates the system is controlling offsite plume migration. The ground water contour map from March 28, 2006, included as Figure 2, Appendix A, depicts the influence of the remediation system.

Thank you for the opportunity to provide environmental services to you. Please call if you have any questions.

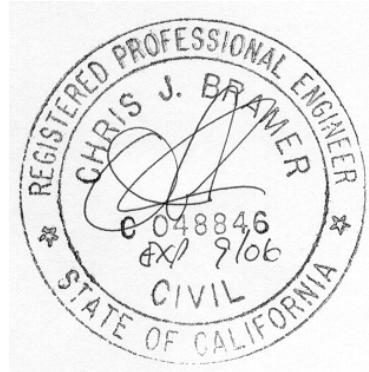
Sincerely,
ECM Group



David Hazard
Environmental Scientist



Chris Brammer
Professional Engineer #C048846



- Appendices:
- A - Figures
 - B - Tables
 - C - Chain of Custody and Laboratory Analytical Report
 - D - Water Sampling Data Sheets
 - E - Standard Operating Procedures

cc: Joan Fleck, North Coast Regional Water Quality Control Board
Michael Caesar, Environmental Health and Safety, SRJC

APPENDIX A

FIGURES

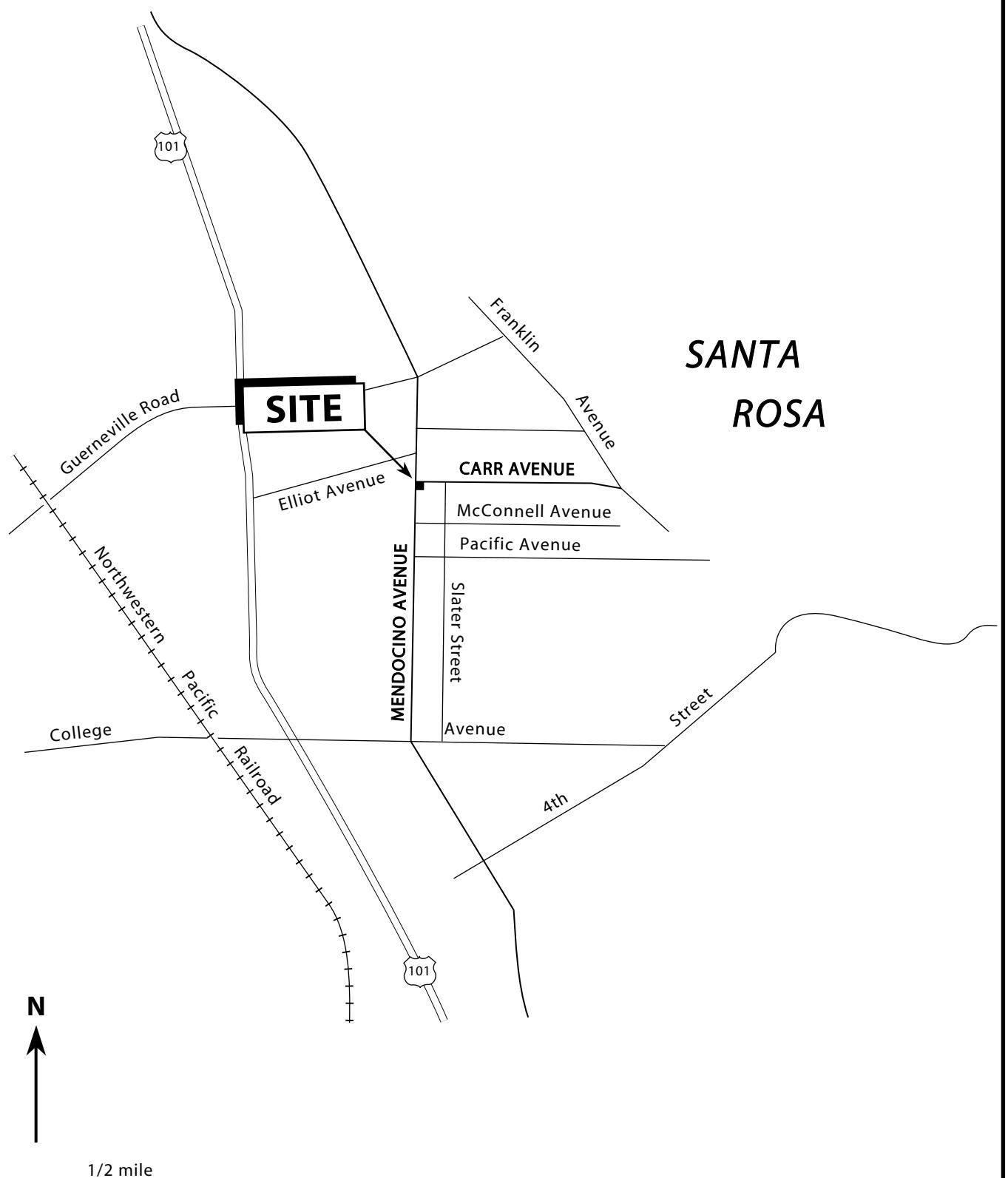
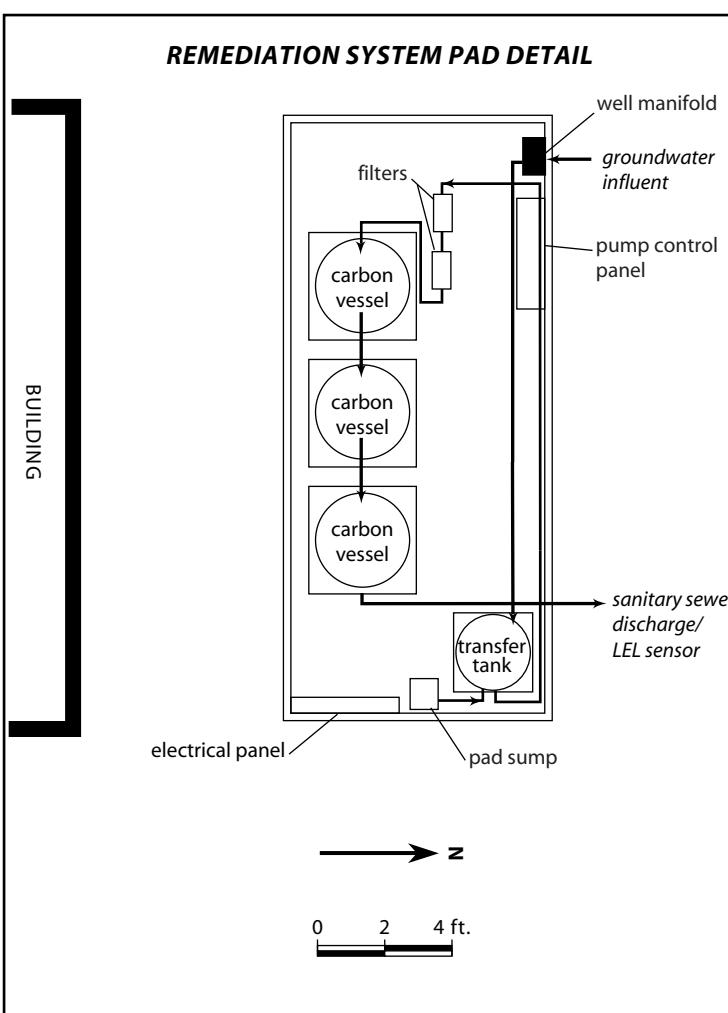
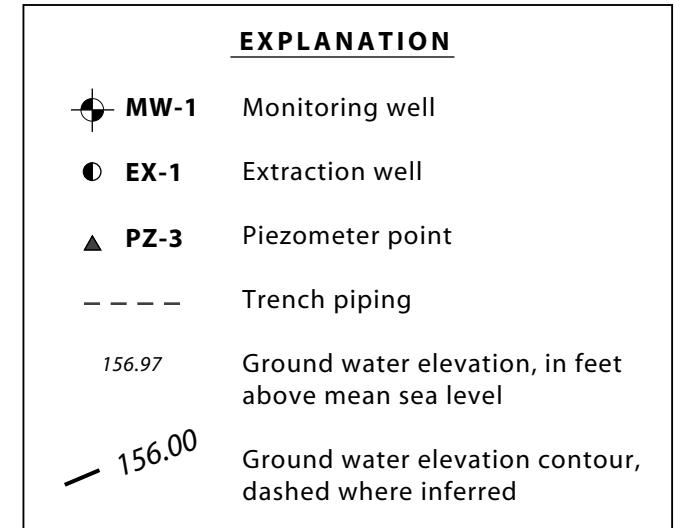


Figure 1.□ Site Location Map - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California



SANTA ROSA
JUNIOR
COLLEGE
(lawn)

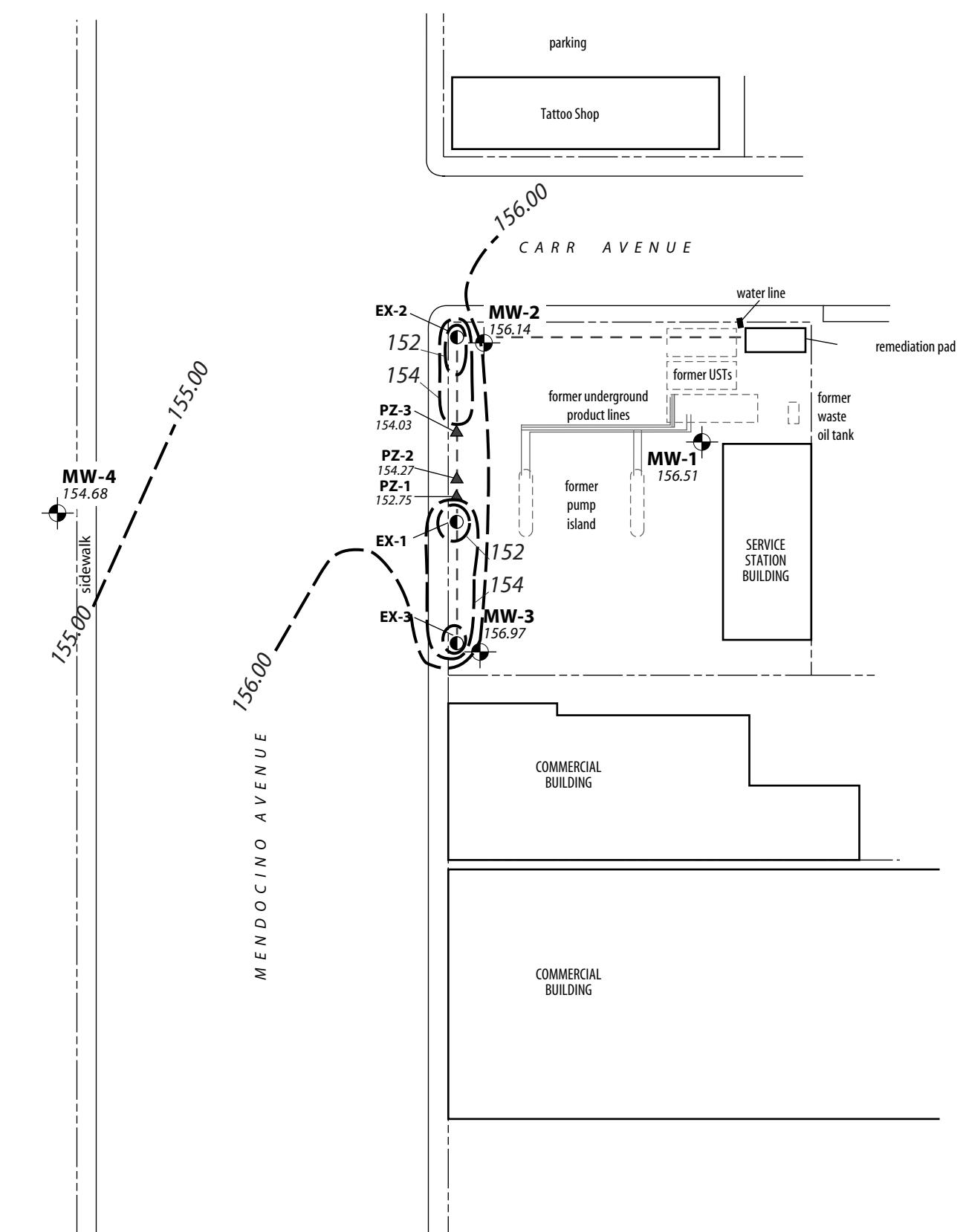
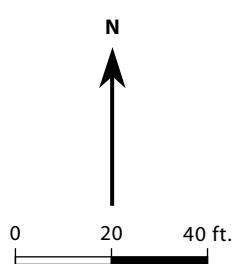


Figure 2. Monitoring Well Locations, Ground Water Contour Map and Remediation System Layout - March 28, 2006 - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California

APPENDIX B

TABLES AND GRAPHS

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1680 Mendocino Avenue, Santa Rosa, California

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-1	11/23/1998	158.90	9.70	149.20	5 - 15	4 - 15	0 - 4	
	3/9/1999		4.51	154.39				
	6/28/1999		8.71	150.19				
	9/29/1999		10.48	148.82				
	12/30/1999		10.15	148.75				
	3/29/2000		6.17	152.73				
	7/11/2000		9.05	149.85				
	10/27/2000		11.17	147.73				
	12/15/2000		9.59	149.31				
	3/7/2001		5.24	153.66				
	6/20/2001		9.47	149.43				
	9/11/2001		11.00	147.90				
	12/10/2001	161.56	7.92	150.98				Resurveyed for EDF compliance, January 9, 2002.
	3/6/2002		6.79	154.77				
	6/5/2002		8.76	152.80				
	9/23/2002		10.75	150.81				
	3/26/2003		6.46	155.10				
	10/3/2003		10.50	151.06				
	3/10/2004		5.89	155.67				
	9/17/2004		10.76	150.80				
	3/1/2005		6.90	154.66				
	3/9/2005		6.18	155.38				
	5/2/2005		7.90	153.66				
	9/23/2005		---	---				DTW not measured due to equipment malfunction.
	10/27/2005		11.42	150.14				
	3/28/2006		5.05	156.51				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1680 Mendocino Avenue, Santa Rosa, California

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-2	11/23/1998	158.58	9.49	149.09	5 - 15	4 - 15	0 - 4	
	3/9/1999		5.81	152.77				
	6/28/1999		8.66	149.92				
	9/29/1999		10.53	148.05				
	12/30/1999		10.33	148.25				
	3/29/2000		6.41	152.17				
	7/11/2000		8.98	149.60				
	10/27/2000		10.56	148.02				
	12/15/2000		9.22	149.36				
	3/7/2001		5.00	153.58				
	6/20/2001		9.14	149.44				
	9/11/2001		12.10	146.48				
	12/10/2001	161.10	5.65	152.93				Resurveyed for EDF compliance, January 9, 2002.
	3/6/2002		6.31	154.79				
	6/5/2002		8.42	152.68				
	9/23/2002		10.35	150.75				
	3/26/2003		6.22	154.88				
	10/3/2003		10.26	150.84				
	3/10/2004		5.62	155.48				
	9/17/2004		10.28	150.82				
	3/1/2005		6.84	154.26				
	3/9/2005		5.92	155.18				
	5/2/2005		7.69	153.41				
	9/23/2005		---	---				DTW not measured due to equipment malfunction.
	10/27/2005		11.11	149.99				
	3/28/2006		4.96	156.14				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1680 Mendocino Avenue, Santa Rosa, California

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-3	11/23/1998	159.31	10.59	148.72	5 - 15	4 - 15	0 - 4	
	3/9/1999		5.49	153.82				
	6/28/1999		9.42	149.89				
	9/29/1999		11.46	147.85				
	12/30/1999		11.07	148.24				
	3/29/2000		7.06	152.25				
	7/11/2000		9.74	149.57				
	10/27/2000		11.81	147.57				TOCs surveyed on October 20, 2000.
	12/15/2000		10.81	148.57				
	3/7/2001		5.98	153.40				
	6/20/2001		10.18	149.20				
	9/11/2001		10.80	148.58				
	12/10/2001	161.95	7.75	151.63				Resurveyed for EDF compliance, January 9, 2002.
	3/6/2002		7.31	154.64				
	6/5/2002		9.47	152.48				
	9/23/2002		11.86	150.09				
	3/26/2003		7.20	154.75				
	10/3/2003		11.35	150.60				
	3/10/2004		6.54	155.41				
	9/17/2004		11.90	150.05				
	3/1/2005		7.62	154.33				
	3/9/2005		6.63	155.32				
	5/2/2005		8.71	153.24				
	9/23/2005		11.76	150.19				
	10/27/2005		11.65	150.30				
	3/28/2006		4.98	156.97				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1680 Mendocino Avenue, Santa Rosa, California

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-4	10/27/2000	159.30	12.56	146.74	5 - 20	4 - 20	0 - 4	TOCs surveyed on October 20, 2000.
	12/15/2000		12.05	147.25				
	3/7/2001		7.37	151.93				
	6/20/2001		11.44	147.86				
	9/11/2001		12.88	146.42				
	12/10/2001	161.87	7.45	151.85				Resurveyed for EDF compliance, January 9, 2002.
	3/6/2002		7.85	154.02				
	6/5/2002		10.37	151.50				
	9/23/2002		12.11	149.76				
	3/26/2003		8.25	153.62				
	10/3/2003		12.00	149.87				
	3/10/2004		7.50	154.37				
	9/17/2004		12.22	149.65				
	3/1/2005		7.71	154.16				
	3/9/2005		7.51	154.36				
	5/2/2005		9.24	152.63				
	9/23/2005		11.59	150.28				
	10/27/2005		13.95	147.92				
	3/28/2006		7.19	154.68				
MW-5	10/27/2000	156.88	11.74	145.14	5 - 20	4 - 20	0 - 4	TOCs surveyed on October 20, 2000.
	12/15/2000		11.15	145.73				
	3/16/2001		7.27	149.61				
	6/20/2001		10.69	146.19				
	9/11/2001		12.00	144.88				
	12/10/2001	159.45	7.00	149.88				Resurveyed for EDF compliance, January 9, 2002.
	3/6/2002		7.70	151.75				
	6/5/2002		9.48	149.97				
	9/23/2002		---	---				Well inaccessible.
	3/26/2003		7.53	151.92				
	10/3/2003		11.10	148.35				
	3/10/2004		6.53	152.92				
	9/17/2004		11.61	147.84				
	3/1/2005		6.07	153.38				
	3/9/2005		6.47	152.98				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1680 Mendocino Avenue, Santa Rosa, California

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-5	5/2/2005	159.45	8.32	151.13	5 - 20	4 - 20	0 - 4	
	9/23/2005		---	---				Well inaccessible due to pavement resurfacing.
	10/27/2005		---	---				Well inaccessible due to pavement resurfacing.
	3/28/2006		---	---				Well inaccessible due to pavement resurfacing.
PZ-1	3/1/2005	161.89	12.19	149.70				
	5/2/2005		10.61	151.28				
	9/23/2005		14.80	147.09				
	10/27/2005		20.39	141.50				
	12/2/2005		19.19	142.70				
	3/28/2006		9.14	152.75				
PZ-2	3/1/2005	161.77	10.11	151.66				
	5/2/2005		9.84	151.93				
	9/23/2005		14.72	147.05				
	10/27/2005		19.56	142.21				
	12/2/2005		18.21	143.56				
	3/28/2006		7.50	154.27				
PZ-3	3/1/2005	161.81	9.25	152.56				
	5/2/2005		9.71	152.10				
	9/23/2005		13.18	148.63				
	10/27/2005		17.00	144.77				
	12/2/2005		14.86	146.95				
	3/28/2006		7.78	154.03				

Explanation:

TOC = Top of Casing

ft = feet

msl = Mean Sea Level

DTW = Depth to Water

GWE = Ground Water Elevation

Table 2. Analytical Results for Ground Water - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California

Sample ID	Date Sampled	TPH (G)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes/Other Detections
		<----- ppb ----->						
MW-1	11/30/1998	16,000	140	28	900	1,900	<250	
	3/9/1999	4,000	53	8.7	74	79	40	
	6/28/1999	2,400	12	1.1	150	110	19	
	9/29/1999	16,000	180	<50	930	770	<500	
	12/30/1999	10,000	190	43	1,000	710	<100	
	3/29/2000	5,100	120	36	370	190	<100	
	7/11/2000	2,800	110	49	160	80	<50	
	10/27/2000	2,600	34	7.4	120	45	<2.0	
	12/15/2000	7,300	120	39	300	180	<20	
	3/7/2001	4,300	43	15	400	170	223	
	6/20/2001	670	21	9.5	83	42	<5.0	
	9/11/2001	1,700	130	64	110	75	16	
	12/10/2001	2,500	280	160	140	200	9.7	
	3/6/2002	<50	<0.50	<0.50	<0.50	<0.50	<2.0	
	6/5/2002	<50	<0.50	<0.50	<0.50	<0.50	2.3	
	9/23/2002	1,800	240	120	140	440	1.6	
	3/26/2003	380	43	11	26	31	2	
	10/3/2003	640	140	16	39	54	<1	
	3/10/2004	260	45	14	14	34.6	1	
	9/17/2004	220	47	8.6	22	38	<1	
	3/9/2005	<25	<0.5	<0.5	<0.5	<0.5	<1	
	9/23/2005	740	34	23	32	110	<1.0	
	3/28/2006	190	0.60	<0.50	24	1.5	<1.0	

Table 2. Analytical Results for Ground Water - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California

Sample ID	Date Sampled	TPH (G)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes/Other Detections
		<----- ppb ----->						
MW-2	11/30/1998	27,000	2,600	200	1,700	3,700	640	
	3/9/1999	49,000	3,400	270	3,400	4,700	530	
	6/28/1999	37,000	4,200	250	3,500	5,000	780	
	9/29/1999	36,000	4,000	230	3,800	4,000	530	
	12/30/1999	31,000	2,900	150	4,400	5,100	<500	
	3/29/2000	26,000	3,100	150	3,100	2,400	520	
	7/11/2000	25,000	2,600	140	3,600	2,200	650	
	10/27/2000	38,000	3,400	130	3,100	2,900	<20	
	12/15/2000	49,000	2,700	110	3,000	2,800	<50	
	3/7/2001	26,000	3,200	88	3,500	2,000	18	Tertiary butanol detected at 12 ppb.
	6/20/2001	21,000	1,900	130	3,500	2,300	<50	
	9/11/2001	22,000	1,600	140	4,100	1,600	<50	
	12/10/2001	20,000	1,900	200	3,000	1,500	<100	
	3/6/2002	<50	9.4	<0.50	<0.50	<0.50	2.7	
	6/5/2002	8,900	410	29	1,400	400	6.6	
	9/23/2002	18,000	1,100	160	2,200	1,100	<100	
	3/26/2003	14,000	810	57	2,500	496	64	
	10/3/2003	20,000	930	61	3,100	470	<40	
	3/10/2004	8,300	410	34	1,200	170	<20	
	9/17/2004	8,600	420	36	1,300	150	<40	
	3/9/2005	1,400	31	2.3	99	9.5	<2	
	9/23/2005	12,000	110	33	640	150	<20	
	3/28/2006	4,900	34	13	300	17	<20	

Table 2. Analytical Results for Ground Water - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California

Sample ID	Date Sampled	TPH (G)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes/Other Detections
		<----- ppb ----->						
MW-3	11/30/1998	56,000	6,600	4,600	1,400	5,800	1,100	
	3/9/1999	220,000	24,000	15,000	5,000	23,000	2,400	
	6/28/1999	89,000	13,000	6,800	2,800	12,000	1,500	
	9/29/1999	100,000	13,000	4,100	3,000	12,000	1,400	
	12/30/1999	58,000	11,000	5,100	2,400	11,000	890	
	3/29/2000	48,000	10,000	3,300	2,000	8,600	1,100	
	7/11/2000	64,000	14,000	2,100	2,600	10,000	<2,500	
	10/27/2000	88,000	16,000	6,100	2,700	10,000	790	Tertiary Butanol detected at 400 ppb.
	12/15/2000	120,000	15,000	5,800	2,300	9,600	830	
	3/7/2001	44,000	11,000	4,900	2,100	8,200	460	
	6/20/2001	55,000	12,000	3,900	2,500	10,000	340	
	9/11/2001	48,000	13,000	2,100	2,600	9,700	390	
	12/10/2001	76,000	16,000	6,800	3,600	13,000	<500	
	3/6/2002	53,000	11,000	4,800	2,300	12,000	540	
	6/5/2002	25,000	6,300	2,400	1,900	7,500	340	
	9/23/2002	39,000	6,800	950	1,200	5,000	1,100	
	3/26/2003	54,000	7,800	2,500	3,100	11,400	310	TAME detected at 23 ppb.
	10/3/2003	50,000	9,500	720	2,300	6,400	430	
	3/10/2004	40,000	8,500	800	2,800	9,300	220	
	9/17/2004	40,000	9,200	700	2,600	7,900	290	
	3/9/2005	41,000	5,300	1,200	2,700	11,000	<200	
	9/23/2005	21,000	1,900	280	1,300	4,200	<100	
	3/28/2006	460	42	6.8	9.4	60	2.4	TBA detected at 14 ppb.

Table 2. Analytical Results for Ground Water - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California

Sample ID	Date Sampled	TPH (G)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes/Other Detections
		<----- ppb ----->						
MW-4	10/27/2000	18,000	6,200	13	79	15	1,100	Tertiary Butanol detected at 560 ppb.
	12/15/2000	22,000	4,400	<25	110	30	1,700	
	3/7/2001	10,000	4,400	<50	89	55	600	Tertiary butanol detected at 280 ppb.
	6/20/2001	16,000	5,300	50	130	<50	900	
	9/11/2001	8,200	2,800	51	56	<25	2,600	
	12/10/2001	11,000	3,300	68	140	120	1,400	
	3/6/2002	6,600	1,800	23	110	<10	810	
	6/5/2002	7,800	2,700	33	85	23	340	
	9/23/2002	11,000	2,400	27	56	16	980	
	3/26/2003	6,600	1,600	20	64	16	210	TAME detected at 2 ppb.
	10/3/2003	12,000	2,100	<50	80	<100	230	
	3/10/2004	4,600	1,100	28	34	<20	160	
	9/17/2004	3,600	730	13	17	<20	110	
	3/9/2005	8,000	860	17	40	<10	83	
	9/23/2005	8,400	940	32	36	16	75	
	3/28/2006	4,500	330	12	25	5.4	22	

Table 2. Analytical Results for Ground Water - Former Service Station, 1680 Mendocino Avenue, Santa Rosa, California

Sample ID	Date Sampled	TPH (G)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Notes/Other Detections
		<----- ppb ----->						
MW-5	10/27/2000	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	12/15/2000	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	3/16/2001	92	5.4	5.6	2.3	6.2	<2.0	
	6/20/2001	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/11/2001	91	14	11	4	12	<5.0	
	12/10/2001	56	8.2	1.6	1.8	3.3	<5	
	3/6/2002	<50	<0.50	<0.50	<0.50	<0.50	<2.0	
	6/5/2002	<50	<0.50	<0.50	<0.50	<0.50	2.8	
	9/23/025	—	—	—	—	—	---	Well inaccessible.
	3/26/2003	65	12	3	<1	7	<1	
	10/3/2003	110	23	3.6	7.4	12	<1	No other oxygenates were detected.
	3/10/2004	85	15	9.8	5.9	19	1	No other oxygenates were detected.
	9/17/2004	43	6.8	2.2	3.7	8.4	<1	
	3/9/2005	<25	<0.5	<0.5	<0.5	<0.5	<1	
	9/23/2005	---	---	---	---	---	---	Well inaccessible due to pavement resurfacing.
	3/28/2006	---	---	---	---	---	---	Well inaccessible due to pavement resurfacing.

Explanation:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tert butyl ether

ppb = parts per billion

Table 3. Analytical Results for Influent Samples - 1680 Mendocino Avenue, Santa Rosa, California

Sample Date	TPH(G)	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	Notes
	<-----ppb----->						
9/3/2004	4,800	480	34	800	170	83	
11/5/2004	450	35	1	35	6	9	
12/7/2004	360	28	2	66	15	9	
1/5/2005	3,100	83	12	340	68	8	
2/11/2005	370	9	2	21	16	7	
4/7/2005	2,100	38	5	130	42	<5	
7/5/2005	<50	0.67	<0.50	0.70	<0.50	2.0	
8/15/2005	650	8.4	0.78	6.2	7.7	1.8	
10/4/2005	110	5.2	0.54	2.2	0.85	3.2	
1/11/2006	2,500	49	13	190	80	<5.0	

Table 4. Ground Water Extraction System Performance Data - 1680 Mendocino Ave, Santa Rosa, California

Date	totalizer reading	flow (gallons)	flow rate since previous reading (gpm)	notes
9/3/2004	1,091	---	---	Initial sampling
11/4/2004	1,091	---	---	
11/5/2004	8,372	7,281	---	
11/10/2004	10,933	2,561	---	Beginning of continuous operation
11/11/2004	36,309	25,376	18	
11/12/2004	54,249	17,940	12	
11/15/2004	72,330	18,081	4	
11/18/2004	109,464	37,134	9	
11/19/2004	121,997	12,533	9	
11/24/2004	186,125	64,128	9	
12/1/2004	280,335	94,210	9	
12/6/2004	280,863	528	0	Carbon filter fouling
12/7/2004	281,883	1,020	1	Carbon filter cleaned
12/10/2004	329,715	47,832	11	
12/21/2004	330,187	472	0	System off for transfer pump replacement
12/30/2004	330,949	762	0	System restarted
1/3/2005	434,035	103,086	24	
1/5/2005	489,904	55,869	19	
1/12/2005	689,605	199,701	20	
1/21/2005	947,809	258,204	20	
1/28/2005	1,142,497	194,688	19	
2/1/2005	1,254,800	112,303	26	
2/4/2005	1,327,670	72,870	17	
2/10/2005	1,469,620	141,950	16	
2/25/2005	1,824,845	355,225	16	
3/1/2005	1,921,939	97,094	11	
3/4/2005	1,993,682	71,743	17	
3/28/2005	2,294,864	301,182	9	
4/5/2005	2,465,264	170,400	17	
4/20/2005	2,769,862	304,598	14	
5/2/2005	2,865,604	95,742	6	
6/2/2005	3,184,877	319,273	7	
7/5/2005	3,435,775	250,898	5	system off on arrival - control sensor malfunction

Table 4. Ground Water Extraction System Performance Data - 1680 Mendocino Ave, Santa Rosa, California

Date	totalizer reading	flow (gallons)	flow rate since previous reading (gpm)	notes
8/3/2005	3,520,162	84,387	2	
8/15/2005	3,560,987	40,825	2	
9/9/2005	3,775,496	214,509	6	
9/23/2005	3,912,889	137,393	7	
9/28/2005	3,962,004	49,115	7	
10/4/2005	4,021,011	59,007	7	
10/12/2005	4,096,738	75,727	7	
10/20/2005	4,253,637	156,899	14	
10/27/2005	4,374,386	120,749	12	
11/2/2005	4,470,507	96,121	13	
11/10/2005	4,593,739	123,232	11	
11/21/2005	4,751,238	157,499	10	
12/2/2005	4,900,270	149,032	9	
12/9/2005	4,938,121	37,851	4	
12/16/2005	5,096,756	158,635	16	
12/21/2005	5,214,432	117,676	16	
12/28/2005	5,248,528	34,096	3	system off per city of Sonoma County Sewer
1/5/2006	5,248,845	317	0	system restarted
1/11/2006	5,249,582	737	0	
1/18/2006	5,396,220	146,638	15	
2/8/2006	5,415,970	19,750	1	
3/1/2006	5,416,401	431	0	
3/23/2006	5,585,376	168,975	5	
3/28/2006	5,605,695	20,319	3	

Table 5. Ground Water Extraction System Performance Data - 1680 Mendocino Avenue, Santa Rosa, California

Date	totalizer reading	flow (gallons)	influent concentration TPH(G) ppb	hydrocarbon removal (kg)	cumulative hydrocarbon removal (kg)
9/3/2004	1,091	---	4,800	---	0.00
11/5/2004	8,372	7,281	450	0.07	0.07
12/6/2004	280,863	272,491	360	0.42	0.49
12/30/2004	330,949	50,086	360	0.07	0.56
1/5/2005	489,904	158,955	3,100	1.04	1.60
2/10/2005	1,469,620	979,716	370	6.43	8.03
4/5/2005	2,465,264	995,644	2,100	4.65	12.69
7/5/2005	3,435,775	970,511	2,100	7.71	20.40
8/3/2005	3,520,162	84,387	0	0.34	20.74
8/15/2005	3,560,987	40,825	650	0.05	20.79
10/4/2005	4,021,011	460,024	110	0.66	21.45
1/11/2006	5,249,582	1,228,571	2,500	6.07	27.52
3/28/2006	5,605,695	356,113	2,500	3.37	30.89

Formula: kg = (G x 3.785L/G x µg/L) / 1,000,000,000

where: kg= kilograms

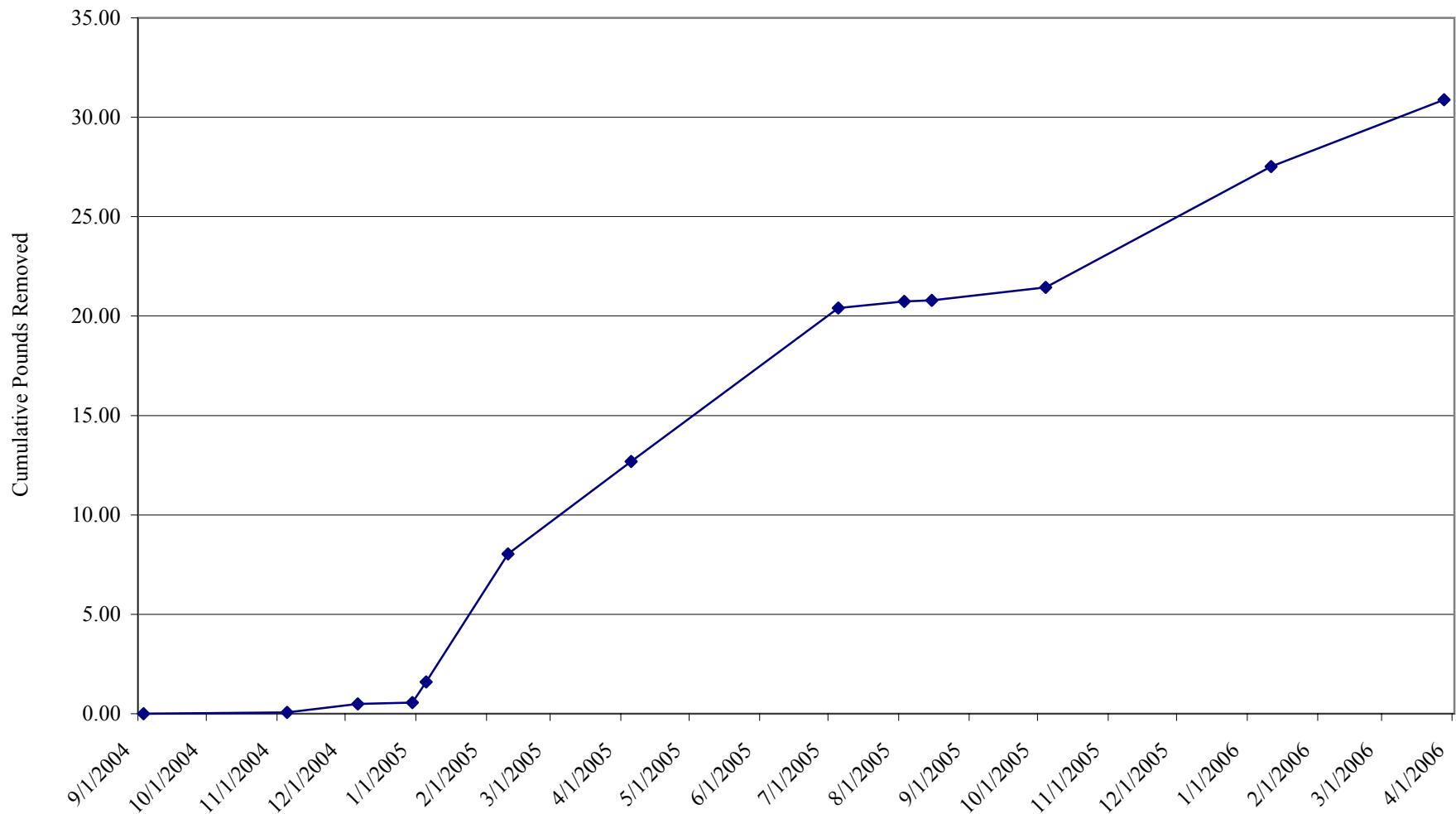
G= flow in gallons

L= liters

µg= micrograms

Note: Hydrocarbon removal calculations use an average of the two latest influent concentrations.

Cumulative Hydrocarbon Removal



Graph 1: Cumulative pounds of hydrocarbon removed by ground water extraction (GWE) system - 1680 Mendocino Avenue, Santa Rosa, California

APPENDIX C

CHAIN OF CUSTODY
AND
LABORATORY ANALYTICAL REPORTS

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

**Jim Green
ECM Group
290 W. Channel Rd.
Benicia, CA 94510**

**Lab Certificate Number: 47355
Issued: 01/24/2006**

**Project Number: 98-439-60
Project Name: Gantner**

Global ID: T0609700730

Certificate of Analysis - Final Report

On January 13, 2006, samples were received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

<u>Matrix</u>	<u>Test</u>	<u>Comments</u>
Liquid	Electronic Deliverables EPA 8260B - GC/MS TPH as Gasoline by GC/MS	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,



Laurie Glantz-Murphy
Laboratory Director

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Jim Green

Samples Received: 01/13/2006

Project Number: 98-439-60
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 47355-001 Sample ID: Mid-A Matrix: Liquid Sample Date: 1/11/2006 1:07 PM

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Methyl-t-butyl Ether	1.2		1.0	1.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butanol (TBA)	16		1.0	10	µg/L	N/A	N/A	1/18/2006	WM2060118
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	102			60	-	130		Reviewed by: MaiChiTu	
Dibromofluoromethane	92.1			60	-	130			
Toluene-d8	102			60	-	130			

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	1/18/2006	WM2060118
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	93.5			60	-	130		Reviewed by: MaiChiTu	
Dibromofluoromethane	94.0			60	-	130			
Toluene-d8	95.2			60	-	130			

Entech Analytical Labs, Inc.

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ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Jim Green

Samples Received: 01/13/2006

Project Number: 98-439-60
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 47355-002 Sample ID: Mid-B Matrix: Liquid Sample Date: 1/11/2006 1:10 PM

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butanol (TBA)	12		1.0	10	µg/L	N/A	N/A	1/18/2006	WM2060118
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	103			60 - 130				Reviewed by: MaiChiTu	
Dibromofluoromethane	92.5			60 - 130					
Toluene-d8	102			60 - 130					

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	1/18/2006	WM2060118
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	94.1			60 - 130				Reviewed by: MaiChiTu	
Dibromofluoromethane	94.4			60 - 130					
Toluene-d8	95.2			60 - 130					

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

1/24/2006 9:20:45 PM - dba

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Jim Green

Samples Received: 01/13/2006

Project Number: 98-439-60
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 47355-003 Sample ID: INF Matrix: Liquid Sample Date: 1/11/2006 1:15 PM

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	49		5.0	2.5	µg/L	N/A	N/A	1/19/2006	WM2060119
Toluene	13		5.0	2.5	µg/L	N/A	N/A	1/19/2006	WM2060119
Ethyl Benzene	190		5.0	2.5	µg/L	N/A	N/A	1/19/2006	WM2060119
Xylenes, Total	80		5.0	2.5	µg/L	N/A	N/A	1/19/2006	WM2060119
Methyl-t-butyl Ether	ND		5.0	5.0	µg/L	N/A	N/A	1/19/2006	WM2060119
tert-Butyl Ethyl Ether	ND		5.0	25	µg/L	N/A	N/A	1/19/2006	WM2060119
tert-Butanol (TBA)	ND		5.0	50	µg/L	N/A	N/A	1/19/2006	WM2060119
Diisopropyl Ether	ND		5.0	25	µg/L	N/A	N/A	1/19/2006	WM2060119
tert-Amyl Methyl Ether	ND		5.0	25	µg/L	N/A	N/A	1/19/2006	WM2060119
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	99.2			60 - 130				Reviewed by: MaiChiTu	
Dibromofluoromethane	93.0			60 - 130					
Toluene-d8	102			60 - 130					

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	2500		5.0	250	µg/L	N/A	N/A	1/19/2006	WM2060119
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	91.0			60 - 130				Reviewed by: MaiChiTu	
Dibromofluoromethane	94.8			60 - 130					
Toluene-d8	95.2			60 - 130					

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/18/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	102	60 - 130
Dibromofluoromethane	92.3	60 - 130
Toluene-d8	100	60 - 130

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060118

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/18/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L
Surrogate for Blank	% Recovery	Control Limits		
4-Bromofluorobenzene	93.7	60 - 130		
Dibromofluoromethane	94.2	60 - 130		
Toluene-d8	94.0	60 - 130		

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200 Fax: (408) 588-0201

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	<0.50	20	16.1	µg/L	80.5	70 - 130
Benzene	<0.50	20	18.1	µg/L	90.6	70 - 130
Chlorobenzene	<0.50	20	19.7	µg/L	98.4	70 - 130
Methyl-t-butyl Ether	<1.0	20	17.0	µg/L	85.0	70 - 130
Toluene	<0.50	20	17.7	µg/L	88.6	70 - 130
Trichloroethene	<0.50	20	20.6	µg/L	103	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	104.0	60 - 130
Dibromofluoromethane	93.3	60 - 130
Toluene-d8	97.2	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	<0.50	20	16.6	µg/L	82.9	2.9	25.0	70 - 130
Benzene	<0.50	20	18.5	µg/L	92.5	2.1	25.0	70 - 130
Chlorobenzene	<0.50	20	20.1	µg/L	100	1.9	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	18.2	µg/L	90.9	6.7	25.0	70 - 130
Toluene	<0.50	20	17.9	µg/L	89.7	1.3	25.0	70 - 130
Trichloroethene	<0.50	20	21.8	µg/L	109	5.8	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	105.0	60 - 130
Dibromofluoromethane	93.1	60 - 130
Toluene-d8	97.7	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	250	269	µg/L	108	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	95.4	60 - 130
Dibromofluoromethane	95.5	60 - 130
Toluene-d8	93.7	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	250	265	µg/L	106	1.4	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	95.8	60 - 130
Dibromofluoromethane	94.7	60 - 130
Toluene-d8	94.4	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

MS Sample Spiked: 47377-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	0.261	20	20.3	µg/L	1/18/2006	100	70 - 130
Methyl-t-butyl Ether	ND	20	22.4	µg/L	1/18/2006	112	70 - 130
Toluene	ND	20	19.4	µg/L	1/18/2006	97.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	113.0	60 - 130
Dibromofluoromethane	110.0	60 - 130
Toluene-d8	101.0	60 - 130

MSD Sample Spiked: 47377-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	0.261	20	19.8	µg/L	1/18/2006	97.7	2.6	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	21.5	µg/L	1/18/2006	108	3.9	25.0	70 - 130
Toluene	ND	20	19.3	µg/L	1/18/2006	96.6	0.41	25.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	111.0	60 - 130
Dibromofluoromethane	111.0	60 - 130
Toluene-d8	103.0	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060119

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/19/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank % Recovery Control Limits

4-Bromofluorobenzene	98.3	60 - 130
Dibromofluoromethane	87.0	60 - 130
Toluene-d8	101	60 - 130

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060119

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/19/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank % Recovery Control Limits

4-Bromofluorobenzene	90.1	60 - 130
Dibromofluoromethane	88.7	60 - 130
Toluene-d8	94.4	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200 Fax: (408) 588-0201

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060119

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/19/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	<0.50	20	16.9	µg/L	84.5	70 - 130
Benzene	<0.50	20	19.2	µg/L	96.0	70 - 130
Chlorobenzene	<0.50	20	21.5	µg/L	108	70 - 130
Methyl-t-butyl Ether	<1.0	20	17.8	µg/L	89.1	70 - 130
Toluene	<0.50	20	19.2	µg/L	95.9	70 - 130
Trichloroethene	<0.50	20	22.1	µg/L	111	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	101.0	60 - 130
Dibromofluoromethane	88.7	60 - 130
Toluene-d8	96.6	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	<0.50	20	17.5	µg/L	87.5	3.5	25.0	70 - 130
Benzene	<0.50	20	19.8	µg/L	99.1	3.3	25.0	70 - 130
Chlorobenzene	<0.50	20	22.1	µg/L	111	2.9	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	18.4	µg/L	91.8	2.9	25.0	70 - 130
Toluene	<0.50	20	19.7	µg/L	98.4	2.6	25.0	70 - 130
Trichloroethene	<0.50	20	22.8	µg/L	114	3.0	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	103.0	60 - 130
Dibromofluoromethane	87.5	60 - 130
Toluene-d8	96.4	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060119

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/19/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	250	251	µg/L	100	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	90.5	60 - 130
Dibromofluoromethane	88.4	60 - 130
Toluene-d8	93.9	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	250	263	µg/L	105	4.8	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	91.3	60 - 130
Dibromofluoromethane	85.4	60 - 130
Toluene-d8	94.3	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060119

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/19/2006

MS Sample Spiked: 47421-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	21.2	µg/L	1/19/2006	106	70 - 130
Methyl-t-butyl Ether	ND	20	20.3	µg/L	1/19/2006	102	70 - 130
Toluene	ND	20	20.6	µg/L	1/19/2006	103	70 - 130
Surrogate	% Recovery	Control Limits					
4-Bromofluorobenzene	105.0	60	-	130			
Dibromofluoromethane	96.8	60	-	130			
Toluene-d8	101.0	60	-	130			

MSD Sample Spiked: 47421-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	21.6	µg/L	1/19/2006	108	1.6	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	19.7	µg/L	1/19/2006	98.4	3.2	25.0	70 - 130
Toluene	ND	20	20.9	µg/L	1/19/2006	105	1.7	25.0	70 - 130
Surrogate	% Recovery	Control Limits							
4-Bromofluorobenzene	104.0	60	-	130					
Dibromofluoromethane	93.5	60	-	130					
Toluene-d8	99.3	60	-	130					

Entech Analytical Labs, Inc.

3334 Victor Court
Santa Clara, CA 95054
(408) 588-0200
(408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to:

TOM GREEN
Company Name:
ECM GROUP

Phone No.:

107-751-0655
Fax No.:
787-751-0653

Purchase Order No.:
Invoice to: (If Different)

Phone:
Quote No.:

Mailing Address:

P.O. BOX 802
City: BENICIA

Email Address:

Project No.:

Project Name:
CANTNER

Company:
ECM GROUP

Billing Address: (If Different)

City:

State: CA
Zip Code: 94510

City:

State: Zip:

Sampler:

Mrs. JACKSON
Global ID:

Phone:

Purchase Order No.:

Invoice to: (If Different)

Phone:

Turn Around Time

- Same Day
 2 Day
 4 Day
 5 Day
 10 Day

Purchase Order No.:

Invoice to: (If Different)

Phone:

Project No.:

98-439-60

Project Name:
CANTNER

Company:
ECM GROUP

Billing Address: (If Different)

City:

State: Zip:

Order ID:

47355

Sample

Client ID / Field Point

Date

Time

Matrix

No. of Containers

EPA 8260B
BTEX X MTBE □ TPH Gas X by 8260B
5 Oxygenates (MTBE, TBA, ETBA, DPE, TAME) X
Lead Scavengers (1,2-DCA & EDB) □ Ethanol □

Base/Neutral/Acid Organics 8270C □ PAH - 8270C SIM □
8270C □ PAH - 8270C □ PCBs - 8082 □
TPH Extractable: Diesel □ Motor Oil □ Other □,
Pesticides-8081 □ w/ Si-Gel Cleanup □
TPH as Gas/BTEX □ MTBE □ by 8015M/8020
Methanol by 8015M

Anions: F □ Cl □ Br □ SO4 □ NO3 □ NO2 □ PO4 □
PH □ TSS □ SC □ TOC □ TRPH □ O & G □
Metals - Circle Below Total □ Dissolved □ STLC □ TCLP □

Remarks

Reinquished by:

Received by:

Special Instructions or Comments

EDD Report

EDF Report

Plating

LUFT-5

RCRA-8

PPM-13

CAM-17

Reinquished by:

Received by:

Metals:

Al, As, Sb, Ba, Be, Bi, B, Cd, Ce, Ca, Cr, Co, Cs, Cu, Fe, Pb, Mg, Mn, Ga, Ge, Hg, In, Li, Mo, Ni, P, K, Si, Ag, Na, S, Se, Sr, Ta, Te, Ti, Sn, Ti, Zn, V, W, Zr

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

**Dave Hazard
ECM Group
290 W. Channel Rd.
Benicia, CA 94510**

**Lab Certificate Number: 48734
Issued: 04/11/2006**

**Project Number: 98-439-14
Project Name: Gantner**

Global ID: T0609700730

Certificate of Analysis - Final Report

On March 30, 2006, samples were received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

<u>Matrix</u>	<u>Test</u>	<u>Comments</u>
Liquid	Electronic Deliverables EPA 8260B for Groundwater and Water - EPA 624 for Wastewater TPH as Gasoline by GC/MS	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,



**Erin Cunniffe
Operations Manager**

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-439-14
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Samples Received: 03/30/2006
Sample Collected by: Client

Lab #: 48734-001 Sample ID: MW-1 Matrix: Liquid Sample Date: 3/28/2006 12:20 PM

EPA 5030C		EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum			
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	0.60		1.0	0.50	µg/L	N/A	N/A	4/7/2006	WM1060407
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	4/7/2006	WM1060407
Ethyl Benzene	24		1.0	0.50	µg/L	N/A	N/A	4/7/2006	WM1060407
Xylenes, Total	1.5		1.0	0.50	µg/L	N/A	N/A	4/7/2006	WM1060407
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	4/7/2006	WM1060407
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/7/2006	WM1060407
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/7/2006	WM1060407
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/7/2006	WM1060407
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/7/2006	WM1060407
1,2-Dichloroethane	ND		1.0	0.50	µg/L	N/A	N/A	4/7/2006	WM1060407
1,2-Dibromoethane (EDB)	ND		1.0	0.50	µg/L	N/A	N/A	4/7/2006	WM1060407
Ethanol	ND		1.0	100	µg/L	N/A	N/A	4/7/2006	WM1060407

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	90.1	60 - 130	Reviewed by: dba
Dibromofluoromethane	108	60 - 130	
Toluene-d8	93.4	60 - 130	

EPA 5030C GC-MS		TPH as Gasoline - GC-MS							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	190		1.0	50	µg/L	N/A	N/A	4/7/2006	WM1060407
Surrogate	Surrogate Recovery	Control Limits (%)							Analyzed by: XBian
4-Bromofluorobenzene	84.9		60	- 130					Reviewed by: dba
Dibromofluoromethane	97.3		60	- 130					
Toluene-d8	88.9		60	- 130					

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

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ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-439-14
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Samples Received: 03/30/2006
Sample Collected by: Client

Lab # : 48734-002 Sample ID: MW-2

Matrix: Liquid Sample Date: 3/28/2006 11:40 AM

EPA 5030C		EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum				
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	34		20	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
Toluene	13		20	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
Ethyl Benzene	300		20	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
Xylenes, Total	17		20	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
Methyl-t-butyl Ether	ND		20	20	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Butyl Ethyl Ether	ND		20	100	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Butanol (TBA)	ND		20	200	µg/L	N/A	N/A	4/10/2006	WM1060410	
Diisopropyl Ether	ND		20	100	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Amyl Methyl Ether	ND		20	100	µg/L	N/A	N/A	4/10/2006	WM1060410	
1,2-Dichloroethane	ND		20	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
1,2-Dibromoethane (EDB)	ND		20	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
Ethanol	ND		20	2000	µg/L	N/A	N/A	4/10/2006	WM1060410	

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	95.0	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	106	60 - 130	
Toluene-d8	96.0	60 - 130	

EPA 5030C GC-MS		TPH as Gasoline - GC-MS							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	4900		20	1000	µg/L	N/A	N/A	4/10/2006	WM1060410
Surrogate	Surrogate Recovery	Control Limits (%)							Analyzed by: XBian
4-Bromofluorobenzene	89.5		60	- 130					Reviewed by: MaiChiTu
Dibromofluoromethane	95.7		60	- 130					
Toluene-d8	91.4		60	- 130					

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

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ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-439-14
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Samples Received: 03/30/2006
Sample Collected by: Client

Lab #: 48734-003 Sample ID: MW-3

Matrix: Liquid Sample Date: 3/28/2006 12:50 PM

EPA 5030C		EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum				
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	42		1.0	0.50	µg/L	N/A	N/A	4/10/2006	WM1060410	
Toluene	6.8		1.0	0.50	µg/L	N/A	N/A	4/10/2006	WM1060410	
Ethyl Benzene	9.4		1.0	0.50	µg/L	N/A	N/A	4/10/2006	WM1060410	
Xylenes, Total	60		1.0	0.50	µg/L	N/A	N/A	4/10/2006	WM1060410	
Methyl-t-butyl Ether	2.4		1.0	1.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Butanol (TBA)	14		1.0	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
1,2-Dichloroethane	ND		1.0	0.50	µg/L	N/A	N/A	4/10/2006	WM1060410	
1,2-Dibromoethane (EDB)	ND		1.0	0.50	µg/L	N/A	N/A	4/10/2006	WM1060410	
Ethanol	ND		1.0	100	µg/L	N/A	N/A	4/10/2006	WM1060410	

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	96.4	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	108	60 - 130	
Toluene-d8	97.4	60 - 130	

EPA 5030C GC-MS		TPH as Gasoline - GC-MS							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	460		1.0	50	µg/L	N/A	N/A	4/10/2006	WM1060410
Surrogate	Surrogate Recovery	Control Limits (%)							Analyzed by: XBian
4-Bromofluorobenzene	90.8		60	- 130					Reviewed by: MaiChiTu
Dibromofluoromethane	98.0		60	- 130					
Toluene-d8	92.7		60	- 130					

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-439-14
Project Name: Gantner

GlobalID: T0609700730

Certificate of Analysis - Data Report

Samples Received: 03/30/2006
Sample Collected by: Client

Lab #: 48734-004 Sample ID: MW-4

Matrix: Liquid Sample Date: 3/28/2006 10:55 AM

EPA 5030C		EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum				
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	330		10	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
Toluene	12		10	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
Ethyl Benzene	25		10	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
Xylenes, Total	5.4		10	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
Methyl-t-butyl Ether	22		10	10	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Butyl Ethyl Ether	ND		10	50	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Butanol (TBA)	ND		10	100	µg/L	N/A	N/A	4/10/2006	WM1060410	
Diisopropyl Ether	ND		10	50	µg/L	N/A	N/A	4/10/2006	WM1060410	
tert-Amyl Methyl Ether	ND		10	50	µg/L	N/A	N/A	4/10/2006	WM1060410	
1,2-Dichloroethane	ND		10	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
1,2-Dibromoethane (EDB)	ND		10	5.0	µg/L	N/A	N/A	4/10/2006	WM1060410	
Ethanol	ND		10	1000	µg/L	N/A	N/A	4/10/2006	WM1060410	

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	98.1	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	105	60 - 130	
Toluene-d8	97.5	60 - 130	

EPA 5030C GC-MS		TPH as Gasoline - GC-MS							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	4500		10	500	µg/L	N/A	N/A	4/10/2006	WM1060410
Surrogate	Surrogate Recovery	Control Limits (%)							
4-Bromofluorobenzene	92.4		60	- 130					
Dibromofluoromethane	94.7		60	- 130					
Toluene-d8	92.9		60	- 130					

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060407

Validated by: dba - 04/10/06

QC Batch Analysis Date: 4/7/2006

Parameter	Result	DF	PQLR	Units
1,2-Dibromoethane (EDB)	ND	1	0.50	µg/L
1,2-Dichloroethane	ND	1	0.50	µg/L
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethanol	ND	1	100	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	92.4	60 - 130
Dibromofluoromethane	103	60 - 130
Toluene-d8	97.5	60 - 130

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060407

Reviewed by: dba - 04/10/06

QC Batch ID Analysis Date: 4/7/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	21.4	µg/L	107	70 - 130
Methyl-t-butyl Ether	<1.0	20	25.6	µg/L	128	70 - 130
Toluene	<0.50	20	20.3	µg/L	102	70 - 130
Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	94.2	60 - 130				
Dibromofluoromethane	104.0	60 - 130				
Toluene-d8	93.2	60 - 130				

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	20.6	µg/L	103	3.8	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	25.2	µg/L	126	1.6	25.0	70 - 130
Toluene	<0.50	20	19.4	µg/L	97.0	4.5	25.0	70 - 130
Surrogate	% Recovery	Control Limits						
4-Bromofluorobenzene	92.7	60 - 130						
Dibromofluoromethane	105.0	60 - 130						
Toluene-d8	91.7	60 - 130						

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060407

Reviewed by: dba - 04/10/06

QC Batch ID Analysis Date: 4/7/2006

MS Sample Spiked: 48773-011

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	19.4	µg/L	4/7/2006	97.0	70 - 130
Methyl-t-butyl Ether	ND	20	23.3	µg/L	4/7/2006	116	70 - 130
Toluene	ND	20	18.3	µg/L	4/7/2006	91.5	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	91.9	60 - 130
Dibromofluoromethane	106.0	60 - 130
Toluene-d8	92.8	60 - 130

MSD Sample Spiked: 48773-011

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	20.2	µg/L	4/7/2006	101	4.0	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	24.7	µg/L	4/7/2006	124	5.8	25.0	70 - 130
Toluene	ND	20	18.9	µg/L	4/7/2006	94.5	3.2	25.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	93.4	60 - 130
Dibromofluoromethane	106.0	60 - 130
Toluene-d8	94.4	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060410

Validated by: MaiChiTu - 04/11/06

QC Batch Analysis Date: 4/10/2006

Parameter	Result	DF	PQLR	Units
1,2-Dibromoethane (EDB)	ND	1	0.50	µg/L
1,2-Dichloroethane	ND	1	0.50	µg/L
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethanol	ND	1	100	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	94.8	60 - 130
Dibromofluoromethane	107	60 - 130
Toluene-d8	96.9	60 - 130

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060410

Reviewed by: MaiChiTu - 04/11/06

QC Batch ID Analysis Date: 4/10/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	21.5	µg/L	108	70 - 130
Methyl-t-butyl Ether	<1.0	20	24.3	µg/L	122	70 - 130
Toluene	<0.50	20	20.1	µg/L	100	70 - 130
Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	93.4	60 - 130				
Dibromofluoromethane	106.0	60 - 130				
Toluene-d8	91.6	60 - 130				

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	19.7	µg/L	98.5	8.7	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	23.2	µg/L	116	4.6	25.0	70 - 130
Toluene	<0.50	20	18.8	µg/L	94.0	6.7	25.0	70 - 130
Surrogate	% Recovery	Control Limits						
4-Bromofluorobenzene	93.5	60 - 130						
Dibromofluoromethane	104.0	60 - 130						
Toluene-d8	93.4	60 - 130						

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060410

Reviewed by: MaiChiTu - 04/11/06

QC Batch ID Analysis Date: 4/10/2006

MS Sample Spiked: 48757-003

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	19.4	µg/L	4/10/2006	97.0	70 - 130
Methyl-t-butyl Ether	ND	20	22.7	µg/L	4/10/2006	114	70 - 130
Toluene	ND	20	18.7	µg/L	4/10/2006	93.5	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	94.9	60 - 130
Dibromofluoromethane	104.0	60 - 130
Toluene-d8	93.0	60 - 130

MSD Sample Spiked: 48757-003

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	19.9	µg/L	4/10/2006	99.5	2.5	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	23.6	µg/L	4/10/2006	118	3.9	25.0	70 - 130
Toluene	ND	20	19.4	µg/L	4/10/2006	97.0	3.7	25.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	94.8	60 - 130
Dibromofluoromethane	102.0	60 - 130
Toluene-d8	93.7	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060407

Validated by: dba - 04/10/06

QC Batch Analysis Date: 4/7/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	87.1	60 - 130
Dibromofluoromethane	93.2	60 - 130
Toluene-d8	92.9	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060407

Reviewed by: dba - 04/10/06

QC Batch ID Analysis Date: 4/7/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	147	µg/L	118	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	92.0	60 - 130
Dibromofluoromethane	93.0	60 - 130
Toluene-d8	91.9	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	147	µg/L	118	0.34	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	91.0	60 - 130
Dibromofluoromethane	92.8	60 - 130
Toluene-d8	91.8	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060410

Validated by: MaiChiTu - 04/11/06

QC Batch Analysis Date: 4/10/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	89.4	60 - 130
Dibromofluoromethane	97.0	60 - 130
Toluene-d8	92.3	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060410

Reviewed by: MaiChiTu - 04/11/06

QC Batch ID Analysis Date: 4/10/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	148	µg/L	118	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	91.1	60 - 130
Dibromofluoromethane	93.6	60 - 130
Toluene-d8	93.8	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	153	µg/L	122	3.1	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	92.8	60 - 130
Dibromofluoromethane	94.1	60 - 130
Toluene-d8	93.0	60 - 130

Entech Analytical Labs, Inc. Chain of Custody / Analysis Request

3334 Victor Court
Santa Clara, CA 95054

(408) 588-0200
(408) 588-0201 - Fax

ELAP No. 2346

Attention to:

DAVE HAZARD

Phone No.:

707-51-0655

Phone:

Company Name:

EDF GROUP

Purchase Order No.:

707-51-0653

Phone:

Mailing Address:

PO BOX 802

Project No. / Name:

Q8-439-14
GANTNER

Phone:

City:

BENICIA

Company:

SARATOGA

Company:

SARATOGA

State:

CA

Billing Address:

CA

Billing Address:

CA

City:

CA

City:

CA

State:

CA

State:

CA

Zip:

CA

Zip:

Entech Order ID:

48734

Invoice to: (If Different)

SHARPE

Phone:

Global ID:

EDF

Project Location:

CA

Project Location:

CA

City:

CA

City:

CA

State:

CA

State:

CA

Zip:

CA

Zip:

Turn Around Time

Circle Applicable

Same Day

1 Day

2 Day

2 Day

3 Day

3 Day

4 Day

4 Day

5 Day

5 Day

10 Day

10 Day

Sample Information

Sampler

EnTech Lab. No.

Matrix

No. of Containers

EPA 8260B Full List

8260 Petroleum: List includes: Gas, BTEX

MTBE, EtBE, TBA, TAME, DIPE, 1,2-DCA, EDB

EPA 8270: Base/Neutral/Acid Organics

PAHs Only PAHs - SIM

PCBs - 8082

Pesticides-8081

TPH Extractable: Diesel, Motor Oil, Other

w/ Si-Gel Cleanup

TPH Gas, BTEX, MTBE by EPA 8015/80218

Metals - Circle Below

Total Dissolved STLC

Instructions TCLP

Remarks

If any N's, Explain:

Lab Use:

Received by: **Dave Hazard**

Date: **10/16/03**

Time: **09:43**

Reinquished by: **Dave Hazard**

Date: **10/16/03**

Time: **10:00**

Received by: **Dave Hazard**

Date: **10/16/03**

Time: **10:00**

Metals: **Al, As, Sb, Ba, Be, Bi, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Ti, Sn, Ti, Zn, V**

Plating

LUFT-5

RCRA-8

PPM-13

CAM-17

Lab Use:

Samples: Iced Y/N Temperature: _____

Appropriate Containers/Preservatives: Y/N Headspace? Y/N

Labels match CoC? Y/N Separate Receipt Log Y/N

APPENDIX D

WATER SAMPLING DATA SHEETS

WATER LEVEL &
PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER GANTNER
98-439-14

DATE: 3/28/06
BY: MST

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW-1		5.05	14.80	21"	
MW-2		4.96	14.75	21"	
MW-3		4.98	14.75	21"	
MW-4		7.19	19.95	21"	
MW-5		—	—	—	2" 1" OF BLACK TOP ON TOP OF WELL TO REMOVE WHICH LEAVE 2X2 HOLE & THE CAR IS TO CLOSE TO WORK ON IT.
EX-1		13.42	—	—	
EX-2		12.51	—	—	
EX-3		12.60	—	—	
PZ-1		9.14	—	—	
PZ-2		7.50	—	—	
PZ-3		7.78	—	—	

WATER SAMPLING DATA

Job Name GANTNER Job Number 98-439-14Well Number MW-1 Date 3/28/06 Time _____Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 14.80Depth to Water (static) 5.05 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 9.75 Volume 1.58 gallonsTotal to be evacuated = 3 x Initial Volume 4.76 gallons

Stop Time _____ Start Time _____ Bailed _____ Pumped _____ Cum. Gal. _____

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 59.6 59.8 60.8pH 7.13 7.09 7.31EC (umhos/cm) 372 410 400

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{1/2} \text{ casing} = 0.163 \text{ gal}/\text{ft}$ $V_1 \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{1/2} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_1 \text{ casing} = 0.826 \text{ gal}/\text{ft}$ $V_1 \text{ casing} = 1.47 \mu\text{d}/\text{ft}$

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

12.20

WATER SAMPLING DATA

Job Name GANTNERWell Number MN-2 Date 3/28/06Well Diameter 2" Well Depth (spec.) _____Depth to Water (static) 4.96 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 9.79Volume 1.59 gallons

Total to be evacuated = 3 x Initial Volume

4.78 gallons

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht. of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{2"} \text{ casing} = 0.163 \text{ gal}/\text{ft}$ $V_{3"} \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{4"} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_{5"} \text{ casing} = 1.226 \text{ gal}/\text{ft}$ $V_{6"} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 59.7 62.4 63.1pH 7.11 6.96 6.98EC (umhos/cm) 387 372 383

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

11/19/06

WATER SAMPLING DATA

Job Name GANTNER Job Number 98-439-14Well Number MW-3 Date 3/28/06 Time _____Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 14.75Depth to Water (static) 4.98 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 9.77 Volume 1.59 gallonsTotal to be evacuated = 3 x Initial Volume 4.77 gallons

Stop Time Start Time Bailed Pumped Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 59.2 60.9 61.6pH 7.58 7.56 7.55EC (umhos/cm) 540 524 507

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \mu\text{gal}/\text{ft}^3$
 $V_{1/2}'' \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{1/4}'' \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{1/8}'' \text{ casing} = 0.653 \mu\text{gal}/\text{ft}$
 $V_{1/16}'' \text{ casing} = 0.126 \mu\text{gal}/\text{ft}$
 $V_1'' \text{ casing} = 1.47 \mu\text{gal}/\text{ft}$

12:50

WATER SAMPLING DATA

Job Name GANTNER Job Number 98-439-14
 Well Number MW-4 Date 3/28/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 19.95
 Depth to Water (static) 7.19 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 12.76 Volume 2.07 gallons
 Total to be evacuated = 3 x Initial Volume 6.23 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{1/2} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{1/4} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{1/8} \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{1/16} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{1/32} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 63.2 61.8 61.8

pH 6.91 6.97 6.96

EC (umhos/cm) 979 630 622

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10:55

2-939-60

11/18/06

12:00

ANTNER

M. JACKSON

ALIZER - 05, 396, 020

CARBON #1 - 34 PSI

#2 - 4 PSI

#3 - 4 PSI

SYSTEM OFF, SHUNT BREAKER POPPED.

TRANSFER PUMP MIGHT BE BURNING OUT
FROM TOO MUCH BACK PRESSURE FROM FIRST
CARBON. RE-SET BREAKER, SYSTEM RUN.

FIELD REPORT

Project Number 98-439-60 Project Name 98-439-60 □ (ESOW)

Date 1/19-1/20

Name M. JACKSON

Project Manager _____

Activity Description

1/19 SYSTEM OFF, TRANSFER PUMP BURNED OUT
DUE TO FLOODING FROM STORM. WATER GOT IN
ELECTRICAL COMPART & IN MOTOR HOUSING.

REMOVED TRANSFER PUMP, ORDER NEW ONE
FROM GRAGER'S 2 WKS MIN. FOR IT TO COME
IN.

ANSO, DRAIN OFF SAME WATER FROM FIRST
CARBON SO I CAN MUCK OUT THE TOP OF
BUILD UP.

1/20 MUCK OUT TOP OF BUILD UP (2) 5 GAL
BUCKET.

FIELD REPORT

**** ALL FIELD REPORTS FOR (ESOW) WORK MUST BE TURNED IN WITH WEEKLY TIME SHEETS ****

FIELD REPORT

Project Number 98-439-60 Project Name GANTNER (ESOW)

Date 2/8/06

Name M. JACKSON

Project Manager _____

Activity Description

PG+E - 11452

TOTALIZER - 05,415,970

INSTALLED NEW TRANSFER PUMP, TESTED, RUNNING FINE.

MOVED OUT ANOTHER 5 GAL. BUCKET OF CARBON.
FROM FIRST UNIT.

PRESSURE TO FIRST UNIT IS 12 BUT INCREASED
TO 18 PSI BEFORE TRANSFER PUMP SHUT OFF. THEN
PRESSURE IN 2+3 GO UP TO 6 BSI FROM 0OR2 PSI.

SYSTEM CAN BE TURNED BACK ON BUT ONLY USING
2+3 CARBON W/ NEW FILTER SYSTEM.

FIELD REPORT

Project Number 98-439-60 Project Name GANTWER (ESOW)

Date 3/1/06

Name M. JACKSON

Project Manager _____

Activity Description

TOTALIZER - 05,416,401
P-GPE - 11453

RE-INSTALL PRE-FILTER w/ 50 MIC FILTER. MOVE
HOSES TO 2 CARBON CONFIG. TEST SYSTEM
FOR LEAKS.

CARBON #1 OFF LINE

NEW CARBON #1 - 6 PSI
CARBON #2 - 6 PSI

RESTART 15:30 (3:30 p.m.) 3/1/06

NO LEAKS, WORKING GOOD. PRESSURE EQUAL
THROUGH CARBONS.

FIELD REPORT

Project Number 98-439-60 Project Name GANTNER (ESOW)

Date 3/23/06

Name M. JACKSON

Project Manager _____

Activity Description

PGPE METER - 11776

TOTALIZER - 05,585,376 (14:00)

CARBON #1 - 10 PSI

CARBON #2 - 6 PSI

SYSTEM DOWN \ UPON ARRIVAL

SHUNT BREAKER TRIPPED, UNKNOWN CAUSE.

RESET BREAKER

SYSTEM UP ↑

✓

TIGHTENED PRE-FILTER LID LEAKING.

FILTER APPEAR FINE.

ALL GOOD.

FIELD REPORT

Project Number 98-539-60 Project Name GANTNER (ESOW)

Date 3/28/06

Name M. JACKSON

Project Manager _____

Activity Description

13:00

PF+PE METER - 11719

TOTALIZER - 05,605,695

CARBON #1 - 6 PSI

#2 - 4 PSI

PRE-FILTER GOOD.

SHUNT BREAKER POPPED, PAD SWITCH TO LOW,
MAKE UP. FINE NOW.

APPENDIX E

ECM STANDARD OPERATING PROCEDURE

ECM STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature or conductivity do not exceed 10% and changes in pH do not exceed one unit).

Ground water samples are collected from the wells/borings with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.